KD-202A-1 Head Lamp

# USER MANUAL

Joyfay Delicate

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## Ⅰ Brief introduction

**Model：** KD-202A-1

**Scope of application:** This product has three wear modes: Clamp type, head type and plug type. Clamp type is designed for glass- wearers and binocular loupe users; Head type is suitable for various different crowds and plug type is designed for matching the binocular loupes of our company.

**Characteristic:** Small volume, simple structure and the relatively cheap price are the major features of this product. The lamp adopts 1w LED bulb for lighting. The normal life of it is about 50000 hours and it can work for a long time.

**Product component:** The main lamp, supporting parts, power supply box, charger, etc.

## II Performance Summarize

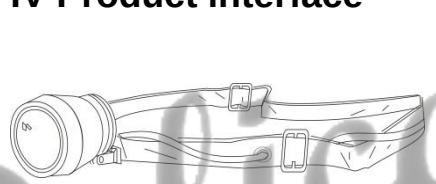
This product uses wide voltage power supply system. The lamp gives out light by the monolithic lens refraction. Small light damage, low weight and the head band is comfortable and wide. Fixture and the insert are both made of plastic which can be disinfected.

The design and production of this light source strictly executes the first part of the safety requirements of medical electrical equipment GB4793.1-2007: general requirements which is guaranteed in safety.

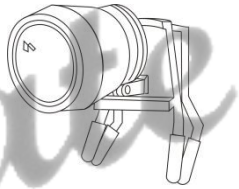
## III Main technical parameters

| Model | Color temperature | Lamp power | Input power | Power supply time | Charge Time |
|---|---|---|---|---|---|
| KD-202A-1（1W） | 6000±500k | 1W | ≤5W | 7h | 4h |
| KD-202A-1（3W） | 6000±500k | 3W | ≤5W | 4h | 6h |

## IV Product interface



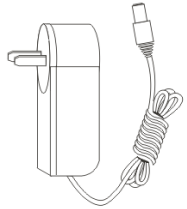
a.Head type



b. Clamp type

c. Plug type

A-1 power supply



Charger

## V Assembly, debugging, operation

Open the packing box, check whether there are missing parts or damage phenomenon of the products according to the product list. If there is any problem, please contact with the dealer or manufacturer in time to get solved properly.

Assembly: Insert the power plug into the output port of the power supply, turn on the power switch, the lamp lights up.

a. Head type: wear the soft belt on your head, regulate the strainer if it is too loose or too tight. Put the power supply box into your pocket or just wear it at your waist;

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b. Clamp type: clip the clamp into the bracket of glasses or binocular loupes and clip the small clip on the right side of the power line. Put the power supply box into your pocket or just wear it at your waist;

c. Plug type: put the insert slot to the support central of binocular loupes, clip the small clip on the right side of the power line and put the power supply box into your pocket.

d. Swinging the main lamp can get the proper lighting angle.

## VI Note

1. When use the battery power supply, you need to charge in time if brightness of the light is significantly weakened.
2. It can't work at the same time with charging, please turn off the power switch.
3. You can't use liquid spray cleaners to clean the product.
4. You need to recharge in time when the battery power is not full, or the battery will be scrapped.
5. Battery life is of about 500 times to charge and discharge, please put the abandoned battery into a designated chemical waste.

## Ⅶ Failure Judgment and Eliminating Methods

| Fault phenomena | Fault cause | Solution |
|---|---|---|
| Turn on the power switch, the indicator is not bright | Run out of power | Charging in time |
| | Battery damage | Replace the same specification battery(2200mA) |
| | Power board fault | Contact with the after-sale service department for solution |
| Turn on the power switch, the indicator is bright but the lamp is not bright | Ligature of lamp holder hasn't been connected well | Connect the ligature well |
| | Not open the flare-adjusting ring | Transfer the flare-adjusting ring clockwise to the maximum |
| | Bulb is damaged | Replace the bulb |
| Other fault | | Contact with the after-sale service department for solution |

## Ⅷ After-sales service warranty

Warranty is of 18 months, provide maintenance service all user's life.

◆In the warranty period, in normally using, the trouble because of the product quality, the consumer depends on the warranty slip and invoice enjoys free maintenance service.

◆If the error caused by refitted or install other functions which is without our company's permission, is not within the scope of warranty.

◆If the model, number, release date is modified, deleted, moved or illegible, you will not enjoy the maintenance service.

◆The error caused by human factor such as falling, squeezing, dip in, wetting, etc. is not within the scope of

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warranty.

◆Once receiving the goods, please sign and accept it after opening the package to inspect and confirm whether the instrument is crushed, scratched or not. Make sure there is no special unnumbered inside. If the goods are damaged and you did not inspect before sign it, it will be at your own risk.

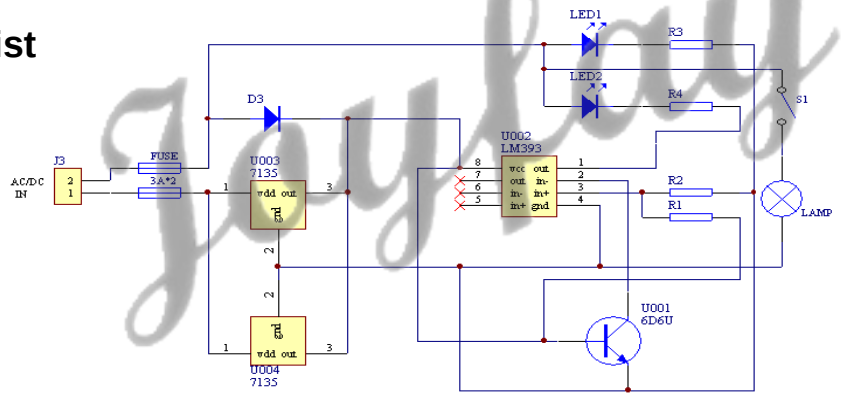
## Ⅸ Transportation and storage conditions

A. Environmental temperature: -40℃～55℃

B. Relative humidity: ≤75%

C. The atmosphere: 50Kpa～106Kpa

## Ⅹ Electrical schematic diagram and components list




| N0. | Material name | Specification | Quantity | Remark |
|---|---|---|---|---|
| 1 | Circuit board | | 1 | |
| 2 | Socket | 2*2.54 | 1 | |
| 3 | Fuse | F2A-L250 | 2 | |
| 4 | Electric current detection chip | 7135 | 2 | |
| 5 | Diode | IN4148 | 1 | |
| 6 | Integrated circuit | LM393 | 1 | |
| 7 | Indicator light | yellow | 2 | |
| 8 | Integrated circuit | 6D6U | 1 | |
| 9 | Power switch | --- | 1 | |
| 10 | Resistance | 390Ω /0.125W | 2 | |
| 11 | Resistance | 300K/0.125W | 1 | |
| 12 | Resistance | 33K/0.125W | 1 | |

Any products may be updated or improved. The change of circuit or element specifications of the product will not with prior notice.

2012 edition

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# Warranty card

| | | | |
|---|---|---|---|
| Company name： | | | |
| Address | | Phone No. | |
| Product name | | Model | |
| Serial Number | | Manufacture date | |
| Sale date | | | |
| Fault description: | | | |
| Remark: The warranty of our products is 18 months since the release date. | | | |

(Please truthfully fill in this form, cut it according to the dotted line and send it back to our company, thank you for your cooperation)

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# Maintenance card

| | | | |
|---|---|---|---|
| Company name： | | | |
| Address | | Phone No. | |
| Product name | | Model | |
| Serial Number | | Manufacture date | |
| Sale date | | | |
| Fault description: | | | |
| Remark: You can enjoy seventy percent discount for the maintenance services even if you use this card over the quality assurance period. | | | |

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